

0069523

**SAF-RC-001**  
**Industrial Hygiene Sampling**  
**FINAL DATA**

**NO DISTRIBUTION REQUIRED**

**COMMENTS:**

SDG 06I-0786-01 SAF-RC-001

Rad only    ☒ Chem only    Rad & Chem

☒ Complete    Partial

**300 Area 333 Bldg**

**RECEIVED**  
MAY 6 4 2006

**EDMC**



## Cover Page

Page 1 of 7

Report Identification Number: 06I-0786-01  
Subcontract Number: 0000X-BO-G0058-B-Mod#4  
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby  
Laboratory Identification Number: DCHM  
SAF#: RC-001 /R33300 J451  
Payroll#: 0636267



### Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
16 Feb 2006	J115W3	06I06503	NMAM 7300M	G061Q034	G WIPE
16 Feb 2006	J115W8	06I06504	NMAM 7300M	G061Q034	G WIPE
16 Feb 2006	J115Y2	06I06505	NMAM 7300M	G061Q034	G WIPE
16 Feb 2006	J115X6	06I06506	NMAM 7300M	G061Q034	G WIPE
16 Feb 2006	J11433	06I06507	NMAM 7300M	G061Q034	G WIPE
16 Feb 2006	J11434	06I06508	NMAM 7300M	G061Q034	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Lisa M. Reid  
Title: Chemist  
Date: February 24, 2006



## Case Narrative Page

Page 2 of 7

Report Identification Number: 06I-0786-01  
Subcontract Number: 0000X-BO-G0058-B-Mod#4  
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby  
Laboratory Identification Number: DCHM  
SAF#: RC-001 /R33300 J451  
Payroll#: 0636267

**General Set Information:** There are 6 samples in set 06I-0786-01, 13 samples in set 06I-0787-01, 4 samples in set 06I-0788-01, 5 samples in set 06I-0790-01 and 4 samples in set 06I-0789-02 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

**Method Summary:** Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

**Sample Preparation:** All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

**Holding Times:** The holding times were met for both sample preparation and analysis.

**Instrument Calibration:** Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

**Initial and Continuing Calibration Verification Analysis:** Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

**Initial and Continuing Calibration Blank Analysis:** No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.02 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

**Method Blank Analysis:** No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL) with the exception of BL-241746-1 which had cadmium at 0.17 ug/sample.

**Dilution(s):** None.



## Case Narrative Page

Page 3 of 7

**Laboratory Control Sample and Duplicate Analysis:** Two Laboratory Control Samples (LCSs) and two Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS result was within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCSs and the LCSDs were within the control limit of 20%.

**Replicate Analysis:** Three samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

**Flagging Codes:** None

**Nonconformance/Corrective Action Report (NC/CAR):** N/A

**Sample Calculation:** The final results are calculated by the following equation:

Final result for aqueous samples ( $\mu\text{g}/\text{sample}$ ) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ( $\mu\text{g}/\text{L}$ )

B = Concentration factor from sample preparation

=  $\frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$

C = Dilution performed at time of analysis

Example Calculation:  $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

**Miscellaneous Comments:** None



## Report Page

Page 4 of 7

Report Identification Number: 06I-0786-01  
Subcontract Number: 0000X-BO-G0058-B-Mod#4  
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby  
Laboratory Identification Number: DCHM  
SAF#: RC-001 /R33300 J451  
Payroll#: 0636267

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J115W3	06I06503	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115W8	06I06504	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115Y2	06I06505	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
J115X6	06I06506	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
J11433	06I06507	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
J11434	06I06508	23 Feb 2006	<0.02	U	<0.07	U	<2.	U
Limit of Detection (LOD)			0.02		0.07		2.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



# QC Summary Page

Page 5 of 7

Report Identification Number: 06I-0786-01  
 Subcontract Number: 0000X-BO-G0058-B-Mod#4  
 Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby  
 Laboratory Identification Number: DCHM  
 SAF: RC-001 /R33300 J451  
 Payroll#: 0636267

Batch ID: G061Q034

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241743-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241743-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-241743-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-241743-1	LCS	Beryllium	µg/sample	11.5	NA	10.0	115.	NA
QC-241743-1	LCS	Cadmium	µg/sample	32.7	NA	30.0	109.	NA
QC-241743-1	LCS	Lead	µg/sample	105.	NA	100.	105.	NA
QD-241743-1	LCSD	Beryllium	µg/sample	11.3	11.5	10.0	113.	1.26
QD-241743-1	LCSD	Cadmium	µg/sample	32.1	32.7	30.0	107.	1.85
QD-241743-1	LCSD	Lead	µg/sample	103.	105.	100.	103.	1.84

MB - Method Blank  
 LCS - Laboratory Control Sample  
 LCSD - Laboratory Control Sample Duplicate  
 MS - Matrix Spike  
 MSD - Matrix Spike Duplicate  
 LD - Laboratory Duplicate

NA - Not Applicable  
 ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) \* 100.0  
 MS, MSD Percent Rec. = ((Result - Parent) / Target) \* 100.0

LCS, LCSD Relative Percent Diff. = ( (|LCS - LCSD|) / ((LCS + LCSD)/2.0) ) \* 100.  
 MS, MSD Relative Percent Diff. = ( (|MS - MSD|) / ((MS + MSD)/2.0) ) \* 100.  
 LD Relative Percent Diff. = ( (|Parent - LD|) / ((Parent + LD)/2.0) ) \* 100

06T-0780d

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST												
Collector: John Peoples		Company Contact: Denise A. Pitts and Henry W. Ruby		Telephone No. 531-1729		Project Coordinator: Janet H. Kessler		Data Turnaround: 24				
Payroll #: 0636067		Sampling Location: 300A Area		SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R333005451		SAP No. RC-001		Method of Shipment: Fedex Express				
Type of Sample: Cd, Pb + Be		Wipe Sample Media: Glass <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		ANALYSIS METHOD (SPECIFIC): 7300 NiOSH		Bill of Lading/Air Bill No. 8544 9435 4840						
FURNISH SAMPLE HAZARD MARKS		MATRIX: A - AIR, W1 - WIPE, X - OTHER		Preservation (i.e., cooling required, etc.)								
Special Handling and/or Storage												
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (sq. ft.)	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
J115W3	WI	02-16-06	100 cm <sup>2</sup>	Cynthia's Radio	No	No	No	X	No	X	No	No
J115W8			100 cm <sup>2</sup>	stop off Bed	No	No	No	X	No	X	No	No
J115Y2			100 cm <sup>2</sup>	SKC 5015/6542	No	No	No	X	No	X	No	No
J115X6			100 cm <sup>2</sup>	MSA AFR mesh	No	No	No	X	No	X	No	No
J11433			NA	Blank	No	No	No	X	No	X	No	No
J11934	WI	02-16-06	NA	Blank	No	No	No	X	No	X	No	No

WCH-SH-302 (10/29/2005)

Page 6 of 7

Enter on line below the first Sample Number from Page One:

515W3

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
<i>John Peoples</i>	02-16-06 / 1630	<i>Locked Cabinet Rm 16 Building 3746</i>	02-16-06 / 1630
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
<i>Goldie Mahan</i>	2-22-06 / 1430	<i>R2 Steffler R. J. Steffler</i>	2-22-06 / 1430
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
<i>R2 Steffler R. J. Steffler</i>	2-22-06 / 1600	<i>Fed Ex</i>	
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
<i>Fed Ex</i>		<i>Julie Warrington</i>	2/23/06 1000
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
<i>Metals 3W</i>			
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
Received By/Name:	DATE / TIME:	Received By/Name:	DATE / TIME:
LABORATORY SECTION	Received By:	Title	DATE / TIME
	<i>Julie Warrington</i>		2/23/06 1000

REVIEWED BY:

DATE:

PRINT/SIGN NAME



## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: John Peoples		Company Contact Denise A. Pitts and Henry W. Ruby		Telephone No. 531-1229		Project Coordinator Joan H. Kessner		Data Turnaround				
Payroll #: 0636267		Sampling Location 300 Area 333 building		SPECIAL INSTRUCTIONS All relevant COAs must be provided: R33300J451 ANALYSIS METHOD (SPECIFIC): 7300 NIOSH		SAF No. RC-001		24				
Type of Sample: Cd, Pb + Be		Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other <input type="checkbox"/>				Method of Shipment Fedex Express						
Shipped To: Data Chem Salt Lake						Bill of Lading/Air Bill No. 8544 9435 4840						
POSSIBLE SAMPLE HAZARD/RI MARKS		MATRIX A - AIR WI - WIPE X - OTHER		Preservation (i.e., cooling required, etc.)		No		No				
Special Handling and/or Storage						No		No				
SAMPLE ANALYSIS												
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area _____ cm <sup>2</sup>	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
J115W3	WI	02-16-06	100 cm <sup>2</sup>	Cynthia's Radio				X		X	X	
J115W8			100 cm <sup>2</sup>	step off Road				X		X	X	
J115Y2			100 cm <sup>2</sup>	SKC SER 566842				X		X	X	
J115X6			100 cm <sup>2</sup>	MSA APR mask				X		X	X	
J11433	V	V	NA	Blank				X		X	X	
J11434	WI	02-16-06	NA	Blank				X		X	X	
										COPY		
										FIELD SAMPLE COPY		

Enter on line below the first Sample Number from Page One:

JUL5W3

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
John Peoples	02-16-06 / 1630	Lockheed Cabinet Rm 16 Building 3746	02-16-06 / 1630
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Lockheed cabinet bldg 3746 Rm #16		RZ Steffler R.Z. Steffler	2-22-06 / 1430
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Goldie Mahan	02-22-06 / 1430		
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
RZ Steffler R.Z. Steffler	WCH 2-22-06 / 1600	Fed Ex	
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
Relinquished By/Store:	DATE / TIME:	Received By/Store:	DATE / TIME:
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PRINT/SIGN NAME